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METHOD AND APPARATUS FOR IMPROVING PERCEIVED SIGNAL QUALITY OF TRANSMITTED INFORMATION IN A FULL DUPLEX WIRELESS COMMUNICATION SYSTEM

ABSTRACT OF THE DISCLOSURE

A full duplex wireless communication system (100) one or more wireless communication devices (101) and fixed infrastructure equipment that includes at least a transcoder (201), a router (203) and a base transcoiver site (BTS, 103). To reduce delays of information packets communicated between the transcoder and the BTS, the transcoder, router and BTS employ a unique synchronization-based priority scheme. In accordance with the priority scheme, an indication of the status of synchronization between the transcoder and the BTS is included in an information packet to guide the router's processing of the packet. In the event that the router stores the packet, the router preferably inserts a time-delay indication into a portion of the packet. The BTS uses the time-delay indication to determine a desired transcoder transmission time, and communicates an indication of the desired transcoder transmission time to the transcoder.